

Appendix 2:

BCA Runs – Commonwealth of Virginia

Benefit-Cost Analysis (BCA) documentation was forwarded to the Federal Emergency Management Agency (FEMA) as part of the Standard and Enhanced State Plan which was submitted for approval in 2006. Appendix 2 incorporated the following BCA material (not all of which are online):

- Benefit-Cost Analysis Runs by the Virginia Department of Emergency Management staff
- Data Documentation Template for Flood Mitigation (Riverine, Coastal A-Zone, Coastal V-Zone) Engineering Data Analysis Methodology [Full Data BCA Modules]
- Data Documentation Template for the Frequency Damage Method (Riverine Limited Data Module): Applicable to Most Hazards
- Completed Data Documentation Template for Gloucester County –Flood Mitigation (Riverine, Coastal A-Zone, Coastal V-Zone) Engineering Data Analysis Methodology [Full Data BCA Modules]
- BCA worksheet sample
- Data Documentation Template for Hurricane/Wind Data Analysis Methodology

For more information, please contact the Commonwealth of Virginia's State Hazard Mitigation Program Manager at (804) 897-6500 Ext. 6563.

**Mitigation Grant Projects
Benefit Cost Analysis Runs**

Completed by Commonwealth of Virginia

Disaster	Project Name	Subgrantee	Short Project Description	Number of Structures	Run by:	Validated by:	Pass/Fail	Module Ran:	Link to BCA Info.
1458	Residential Acquisition Project (appeal)	City of Salem	Acquisition/demolition of residential structures	2	M. Pope		Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1458\Salem\Residential\BCA
1458	Residential Flood Mitigation (appeal)	City of Waynesboro	Acquisition/demolition of residential structures	4	Dr. Shane Parson	M. Pope	Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1458\Waynesboro\BCA
1491	D&D Partnership	Town of Bluefield	Acquisition/demolition of commercial structure	1	D. Messmer		Fail	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Bluefield\D&D
1491	King Vest LLC	Town of Bluefield	Acquisition/demolition of commercial structure	1	D. Messmer		Fail	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Bluefield\KingVest
1491	Thistle Foundary	Town of Bluefield	Acquisition/demolition of commercial structures	3	D. Messmer		Fail	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Bluefield\Thistle
1491	Yost Apartment Complex	Town of Bluefield	Acquisition/demolition of commercial structures	1	Town of Bluefield	D. Messmer	Pass	Full Data Riverine	Paper copy only.
1491	Rutherford Building Acquisition	Town of Bluefield	Acquisition/demolition of commercial structure	1	Town of Bluefield	D. Messmer	Pass	Full Data Riverine	Paper copy only.
1491	Claremont Beach Elevation	Town of Claremont	Elevation of residential structures	2	H. Hersi		Fail	Full Data Coastal A	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Claremont Town\BCA
1491	2004 Acquisitions & Elevations, Phase II	Gloucester County	Elevation and acquisition/demolition of residential structures	24	D. Messmer		Pass	Full Data Coastal A and V	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Gloucester\BCA
1491	Marrowbone Creek Acquisition	Henry County	Acquisition/demolition of residential structures	4	M. Pope		Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Henry\BCA
1491	Isabel Elevations	Isle of Wight County	Elevation of residential structures	4	D. Messmer		Fail	Full Data Coastal A	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Isle of Wight County\BCA
1491	Elevations	Lancaster County	Elevation of residential structures	5	H. Hersi		Fail	Full Data Coastal A	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Lancaster\Lancaster - 5 House Elevation\BCA
1491	Elementary School Acquisition	City of Poquoson	Acquisition/demolition of school	1	D. Messmer		Fail	Full Data Coastal A	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Poquoson\School
1491	Elevations Phase II	City of Poquoson	Elevation of residential structures	23	D. Messmer		Pass	Full Data Coastal A and V	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Poquoson\Elevation Project\BCA
1491	Relocation	Pulaski County	Relocation of County Sheriff's Office	1	H. Hersi		Fail	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Pulaski
1491	Residential Flood Mitigation Project- Phase IV	City of Waynesboro	Acquisition/demolition of residential structure	1	D. Messmer		Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Waynesboro\BCA
1491	Public Works Complex	Town of West Point	Acquisition/demolition of the City Public Works Complex	1	D. Messmer		Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\West Point\Public Works\BCA
1491	Acquisition of 1 Structure	Waynesboro	Acquisition of 1 Residential Structure	1	D. Messmer		Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1491\Projects\Phase II\Waynesboro\BCA
1544	Acquisition of 1 Residential Structure	Giles County	Acquisition of 1 Residential Structure	1	Contractor	O. Amiri	Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1544\Projects\Giles County
1544	Chesterfield County Acquisition	Chesterfield County	Acquisition of 4 Structures	4	D. Messmer		Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1544\Projects\Chesterfield
1544	Elevation of 3 Residential Structures	Gloucester County	Elevation of 3 Residential Structures	3	D. Messmer		Pass	Full Data Coastal A and V	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1544\Projects\Gloucester County
1544	Acquisition of 3 Residential Structures	City of Salem	Acquisition of 3 Residential Structures	3	D. Messmer		Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1544\Projects\City of Salem
1544	Floodproofing	City of Staunton	Floodproofing 11 Structures	11	D. Messmer		Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1544\Projects\Staunton
1570	Acquisition of 1 Residential Structure	Montgomery County	Acquisition of 1 Structure	1	M. Pope		Fail	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1570\Montgomery County
1570	Alleghany County Acquisition	Alleghany County	Acquisition of 1 Structure	1	D. Messmer		Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1570\Projects\Alleghany
1570	City of Roanoke	City of Roanoke	Acquisition of 1 Structure	1	D. Messmer		Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1570\Projects\City of Roanoke
FMA 2005	City of Roanoke	City of Roanoke	Acquisition of 3 Structures	3	D. Messmer		Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\HMG\DR_1570\Projects\City of Roanoke
FMA 2006	Acquisition of 1 Commercial Building	Town of Bluefield	Acquisition of the Moore Building	1	Contractor	O. Amiri	Pass	Full Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\FMA\FMA_2006
PDM	Acquisition and Demolition of School	City of Poquoson	Acquisition/demolition of school	1	D. Messmer		Pass	Full Data Coastal A	\\Tcf1\divisions\Mitigation\SHMO\PDM\2006\Projects\Poquoson, City of
PDM	Elevation of 15 Residential Structures	Gloucester County	Elevation of 15 Residential Structures	15	D. Messmer		Fail	Full Data Coastal A and V	\\Tcf1\divisions\Mitigation\SHMO\PDM\2006\Projects\Gloucester County
PDM	Shockoe Bottom Flood Project	City of Richmond	Shockoe Bottom Flood Project	1	City of Richmond	O. Amiri	Pass	Limited Data Riverine	\\Tcf1\divisions\Mitigation\SHMO\PDM\2006\Projects\Richmond
1491	Elevation of 18 Residential Structures	Hampton	Elevation of 18 Residential Structures	18	O. Amiri		Pass	Full Data Coastal	\\Tcf1\divisions\Recovery and Mitigation\Mitigation\SHMO\HMG\DR_1491\Projects\Phase I\Hampton\BCA City of Hampton Elevations
Cong. Request	Acquisition of 1 Structure	City of Hampton	Acquisition of 1 Structure	1	O. Amiri		Fail	Very Limited, Limited, and Full Data Riverine	
RFC	Acquisition of 1 Residential Structure	Roanoke County	Acquisition of 1 property	1	D. Messmer	M. Pope	Pass	Limited and Full Data Riverine	\\Tcf1\divisions\Recovery and Mitigation\Mitigation\SHMO\Repetitive Loss List\Application Information\Roanoke Applicat
RFC	Acquisition of 2 Properties	Roanoke County	Acquisition of 2 properties	2	D. Messmer	M. Pope	Fail	Limited and Full Data Riverine	\\Tcf1\divisions\Recovery and Mitigation\Mitigation\SHMO\Repetitive Loss List\Application Information\Roanoke Applicat
Shelf	Acquisition of 1 Residential Structure	City of Chesapeake	Acquisition of 1 Residential Structure	1	M. Pope	O. Amiri	Pass	Full Data Riverine	\\Tcf1\dem.state.va.us\divisions\Recovery and Mitigation\Mitigation\SHMO\FMA\ChesapeakePot2007
SUMMARY				148	Total Number of Project BCA's performed = 36				
					Total Number of Structures with BCAs Performed = 148				

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